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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,630	01/28/2000	Eric T. Stubbs	303.662US1	2483
21186	7590	06/01/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			KIM, KEVIN	
P.O. BOX 2938			ART UNIT	
MINNEAPOLIS, MN 55402			PAPER NUMBER	

2634  
DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/493,630

**Applicant(s)**

STUBBS, ERIC T.

**Examiner**

Kevin Y Kim

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-23, 25, 27-48 and 51-53 is/are allowed.  
6) ☒ Claim(s) 24, 26 and 49 is/are rejected.  
7) ☒ Claim(s) 50 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 24, as amended, have been considered but are moot in view of the new ground(s) of rejection. Upon a review of a previously cited prior art reference (Jefferson et al) the indication of allowability of claims 26 and 49 are withdrawn and the ground of rejection is set forth below.

### ***Claim Rejections - 35 USC § 102***

2. Claims 24, 26 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Jefferson et al (previously cited).

Consider claim 24. Referring to Fig. 4, Jefferson et al disclose a phase detector comprising;

“a first input node” (204), “a second input node” (204), “a first output node” (208), “a second output node” (222),

“a first phase comparator” (202) coupled between the first input node (204), the second input node (206) and the first output node (208),

“a first variable delay line” (216) coupled to the first input node (204),

“a second phase comparator” (218) coupled between the first delay line (216), the second input node (204) and the second output node (218).

Consider claim 26. Referring to Fig. 4, Jefferson et al disclose a phase detector comprising;

“a first input node” (230), “a second input node” (232), “a first output node” (222), “a second output node” (208),

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“a first phase comparator” (218) coupled between the first input node (230), the second input node (232) and the first output node (222),  
“a first delay line” (214) coupled to the first input node (230),  
“a second phase comparator” (202) coupled between the first delay line (214), the second input node (232) and the second output node (208), wherein the first phase comparator (218) as a micro phase detector, produces a fine delay adjustment control (219) and the second phase comparator (202) as a macro phase detector produces a coarse delay line adjustment control (211).

Consider claim 49. Referring to Figs. 1A and 4, Jefferson et al disclose a processing system comprising a processor (101A) and a memory (105A) having a phase detector comprising;

“a first input node” (204), “a second input node” (204), “a first output node” (208), “a second output node” (222),  
“a first phase comparator” (202) coupled between the first input node (204), the second input node (206) and the first output node (208),  
“a first delay line” (216) coupled to the first input node (204),  
“a second phase comparator” (218) coupled between the first delay line (216), the second input node (204) and the second output node (218).

***Allowable Subject Matter***

3. Claims 1-23,25, 27-48, 51-53 are allowed.

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4. Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 703-305-4082. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kvk



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SUPERVISORY PATENT EXAMINE  
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